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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/590,991DATE: 06/16/2000
TIME: 19:44:03

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This Raw Listing contains the General Information
Section and up to first 5 pages.

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1 <110> APPLICANT: Adamou, John
2 Choi, Gil
3 <120> TITLE OF INVENTION: Streptococcus Pneumoniae Proteins and Vaccines
4 <130> FILE REFERENCE: 469201-475
5 <140> CURRENT APPLICATION NUMBER: US/09/590,991
6 <141> CURRENT FILING DATE: 2000-06-09
7 <150> EARLIER APPLICATION NUMBER: U.S. 60/138,453
8 <151> EARLIER FILING DATE: 1999-06-10
9 <160> NUMBER OF SEQ ID NOS: 8
10 <170> SOFTWARE: PatentIn Ver. 2.1
11 <210> SEQ ID NO 1
12 <211> LENGTH: 21
13 <212> TYPE: DNA
14 <213> ORGANISM: Artificial Sequence
15 <220> FEATURE:
16 <223> OTHER INFORMATION: Description of Artificial Sequence:Forward primer
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23 <213> ORGANISM: Artificial Sequence
24 <220> FEATURE:
25 <223> OTHER INFORMATION: Description of Artificial Sequence:Reverse primer
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32 <213> ORGANISM: Artificial Sequence
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42 <220> FEATURE:
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55   cctgtgatag acaataacac tagcaatgaa gaagcaaaaa tcaaagaaga aaattccaat 240
56   aaatcccaag gagattatac ggactcattt gtgaataaaa acacagaaaa tcccaaaaaa 300
57   gaagataaag ttgtctatat tgctgaattt aaagataaag aatctggaga aaaagcaatc 360
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82   gaaaaagaga ttgactttta gtttgcacct gacacagaca aagaactcta taaagaagat 1860
83   atcatcgttc cagcaggatc tacatcttgg gggccaagaa tagatttact tttaaaaccc 1920
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88 <212> TYPE: PRT
89 <213> ORGANISM: Streptococcus pneumoniae
90 <400> SEQUENCE: 6
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98			50					55				60				
99	Asn	Asn	Thr	Ser	Asn	Glu	Glu	Ala	Lys	Ile	Lys	Glu	Glu	Asn	Ser	Asn
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142				405						410					415	
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149   Leu Lys Phe Val Tyr Ile Gly Lys Gly Gln Asp Gln Asp Leu Ile Gly
150   465                      470                      475                      480
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152               485                      490                      495
153   Asp Leu Lys Asn Ala Phe Lys Lys Ala Met Asp Lys Gly Ala Arg Ala
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155   Ile Met Val Val Asn Thr Val Asn Tyr Tyr Asn Arg Asp Asn Trp Thr
156               515                      520                      525
157   Glu Leu Pro Ala Met Gly Tyr Glu Ala Asp Glu Gly Thr Lys Ser Gln
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159   Val Phe Ser Ile Ser Gly Asp Asp Gly Val Lys Leu Trp Asn Met Ile
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161   Asn Pro Asp Lys Lys Thr Glu Val Lys Arg Asn Asn Lys Glu Asp Phe
162               565                      570                      575
163   Lys Asp Lys Leu Glu Gln Tyr Tyr Pro Ile Asp Met Glu Ser Phe Asn
164               580                      585                      590
165   Ser Asn Lys Pro Asn Val Gly Asp Glu Lys Glu Ile Asp Phe Lys Phe
166               595                      600                      605
167   Ala Pro Asp Thr Asp Lys Glu Leu Tyr Lys Glu Asp Ile Ile Val Pro
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169   Ala Gly Ser Thr Ser Trp Gly Pro Arg Ile Asp Leu Leu Leu Lys Pro
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177 <212> TYPE: DNA

178 <213> ORGANISM: Streptococcus pneumoniae

179 <400> SEQUENCE: 7

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182   gaaaaatcta gttttactat tgatagaaat atttcaacaa ttagagactt tgaaaataaa 180
183   gacttaaaga aactcattaa aaagaaattt agagaagttg atgattttac aagtgaaact 240
184   ggtaagagaa tggaggaata cgattataaa tacgatgata aaggaaatat aatagcctac 300
185   gatgatggga ctgatctaga atatgaaact gagaaacttg acgaaatcaa atcaaaaatt 360
186   tatggtgttc taagtccgtc taaagatgga cactttgaaa ttcttggaaa gataagtaat 420
187   gtttctaaaa atgccaaagg atattatggg aataactata aatctataga aatcaaagcg 480
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191   ccctatgtat caagttatgg gaatgtcata gaattagggg aaggagatct ttcaaaaaac 720
192   aaaccagaca atttaactaa aatggaatct ggtaaaatct attctgattc agaaaaacaa 780
193   caatatctgt taaaggataa tatcattcta agaaaaggct atgcactaaa agtgactacc 840
194   tataatcctg gaaaaacgga tatgttagaa ggaaatggag tctatagcaa ggaagatata 900

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221 <212> TYPE: PRT

222 <213> ORGANISM: Streptococcus pneumoniae

223 <400> SEQUENCE: 8

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227      20          25          30
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229      35          40          45
230      Arg Asn Ile Ser Thr Ile Arg Asp Phe Glu Asn Lys Asp Leu Lys Lys
231      50          55          60
232      Leu Ile Lys Lys Lys Phe Arg Glu Val Asp Asp Phe Thr Ser Glu Thr
233      65          70          75          80
234      Gly Lys Arg Met Glu Glu Tyr Asp Tyr Lys Tyr Asp Asp Lys Gly Asn
235      85          90          95
236      Ile Ile Ala Tyr Asp Asp Gly Thr Asp Leu Glu Tyr Glu Thr Glu Lys
237      100          105          110
238      Leu Asp Glu Ile Lys Ser Lys Ile Tyr Gly Val Leu Ser Pro Ser Lys
239      115          120          125
240      Asp Gly His Phe Glu Ile Leu Gly Lys Ile Ser Asn Val Ser Lys Asn
241      130          135          140
242      Ala Lys Val Tyr Tyr Gly Asn Asn Tyr Lys Ser Ile Glu Ile Lys Ala
243      145          150          155          160
244      Thr Lys Tyr Asp Phe His Ser Lys Thr Met Thr Phe Asp Leu Tyr Ala

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